import java.util.zip.CRC32;

public class CRCExample {

public static void main(String[] args) {

String originalData = "Hello, CRC!";

byte[] data = originalData.getBytes();

long checksum = computeChecksum(data);

data[5] ^= 0x01;

boolean isValid = validateChecksum(data, checksum);

if (isValid) {

System.out.println("Data is valid. No errors detected.");

} else {

System.out.println("Data is corrupted. Error detected.");

}

}

private static long computeChecksum(byte[] data) {

CRC32 checksumCalculator = new CRC32();

checksumCalculator.update(data);

return checksumCalculator.getValue();

}

private static boolean validateChecksum(byte[] data, long checksum) {

CRC32 checksumCalculator = new CRC32();

checksumCalculator.update(data);

return checksumCalculator.getValue() == checksum;

}

}